



Integrity Assessment of E1-E3 Sailors at Naval Submarine School: FY2007 – FY2011

**by
Dr. Barbara Wyman Curtis, Mr. Joseph Baldi,
Mr. Perry Hoskins, ETCM(SS) Ashley McGee
January, 2012**

Sponsor: Submarine Learning Center, Groton, CT

Report Documentation Page				Form Approved OMB No. 0704-0188	
Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.					
1. REPORT DATE JAN 2012		2. REPORT TYPE		3. DATES COVERED 00-00-2012 to 00-00-2012	
4. TITLE AND SUBTITLE Integrity Assessment Of E1-E3 Sailors At Naval Submarine School: FY2007-FY2011				5a. CONTRACT NUMBER	
				5b. GRANT NUMBER	
				5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)				5d. PROJECT NUMBER	
				5e. TASK NUMBER	
				5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Submarine Learning Center, Groton, CT, 06349				8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)				10. SPONSOR/MONITOR'S ACRONYM(S)	
				11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT Approved for public release; distribution unlimited					
13. SUPPLEMENTARY NOTES					
14. ABSTRACT					
15. SUBJECT TERMS					
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT Same as Report (SAR)	18. NUMBER OF PAGES 18	19a. NAME OF RESPONSIBLE PERSON
a. REPORT unclassified	b. ABSTRACT unclassified	c. THIS PAGE unclassified			



Summary

- **Beginning SEP 2008, an Accession Integrity Training module has been taught to new accession Sailors prior to Basic Enlisted Submarine School (BESS) A-060-0011. In OCT 2010, the module was re-named Watchstanding Integrity Training in OCT 2010 to reflect the inclusion of case studies from the Hartford collision.**
- **Analysis indicates improvements in ethical behavior using Non-judicial Punishment (NJP) data from Navy Submarine School (NSS) as a metric reflecting the NSS environment in FY2009, FY2010, and FY2011.**



Background

Due to integrity issue concerns throughout the fleet, the Submarine Learning Center (SLC) developed training to enhance integrity, the Navy Core Values and ethical behavior:

- Integrity training taught during indoctrination week prior to BESS since SEP 2008. The Accession Integrity Training module has been taught to new accession Sailors prior to Basic Enlisted Submarine School (BESS) A-060-0011.**
- Integrity module instruction consisting of scenario-based case studies are also presented in learning continuum courses. The cases are given as homework and discussed in class the next day. The courses and their schedule are listed in the Note Section below.**



Watchstanding Accession Integrity Training Module

- **Consists of discussions incorporating relevant integrity vignettes; added case studies and audio from the Hartford collision**
- **Objectives include knowing the meaning of integrity within the Navy environment and determining correct course of action when confronting integrity challenges**



Definition of Integrity Taught

- 1) Absolute honesty, trustworthiness and reliability in submarine training, qualifications, operations and maintenance.**
- 2) Demonstrating the moral courage to accept responsibility for one's actions.**
- 3) Placing responsibility to the nation and Navy ahead of loyalty to individuals. The case studies are related to the student's current Navy environment, e.g. extra day of leave and says the flight was cancelled, proper watch standing. In addition, discussion on "What do you do?" "if you see your buddy cheating on an exam or logging security rounds when you know he didn't do them.**



Methodology: Impact of Integrity Training on E1-E3 Sailors

Compare NSS NJP data pre-integrity training (FY2007 FY2008) to post-integrity training NJP data (FY2009 - FY2011)

- **NJP integrity offenses in the E1-E3 Sailor population are an objective measure determined by SLC SMEs; data was standardized using AAOB A-School Courses.* AAOB refers to the total number of students onboard each day averaged over a specified time frame. Some E1 – E3 Sailors in the NJP 2009 group did not receive integrity training.**
- **Statistical tests applied to determine if a significant association between integrity training and number of integrity breaches exists.**
 - * **A-School Courses are apprentice courses that are required prior to a first sea tour; include ET “A” School, FT “A” School, STS“A” School, BESS, ATT E-CORE, TACT COMPS, SUB OFF BASIC, SOIC, CSRR Operator, and Basic Mechanical Skills.**

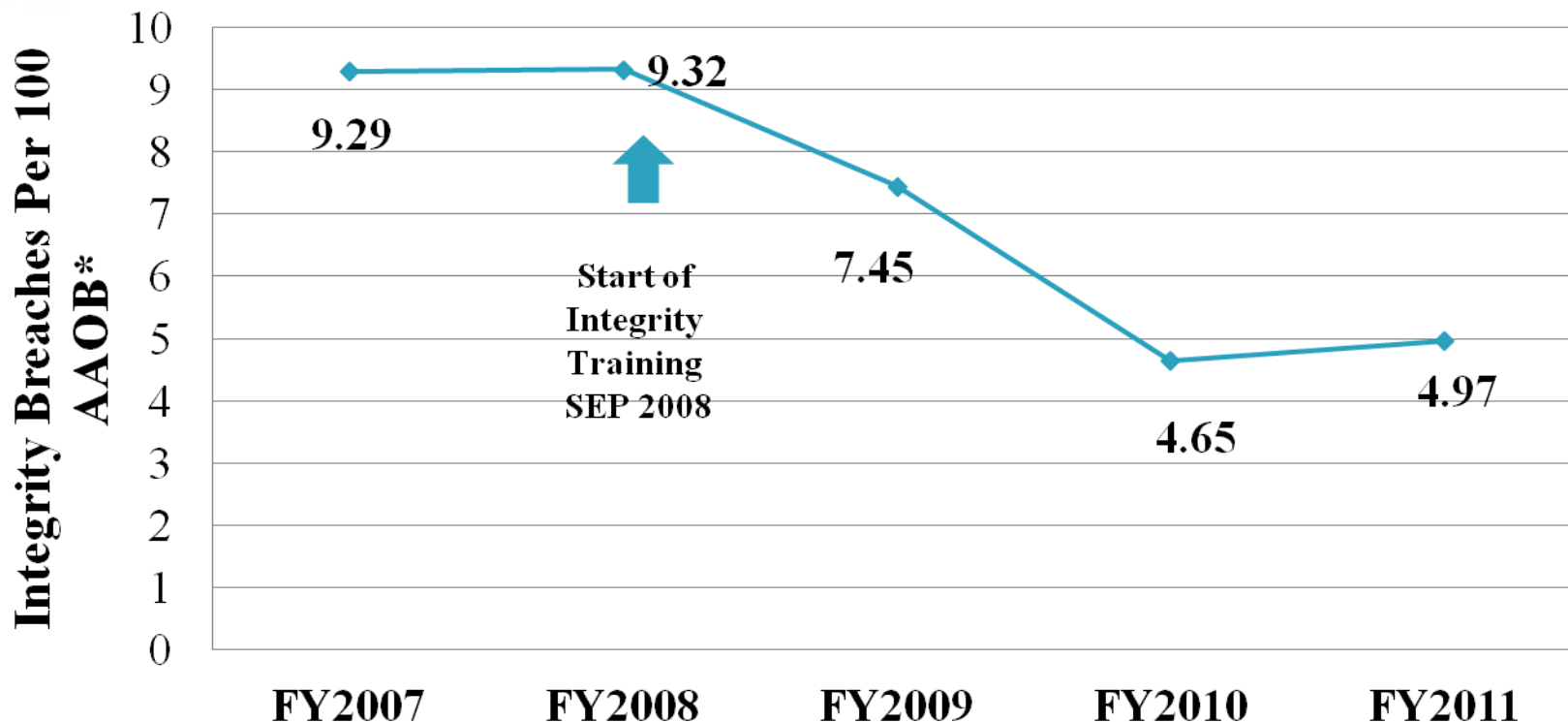


Operational Definition of Integrity Breaches

- **From the list of NJP offenses, Subject Matter Experts (SME) identified which offenses breaches of integrity. Only those breaches provided sufficient information to determine if the offense was a breach of integrity.**
- **SMEs defined integrity as the ability to trust a Sailor to do the right thing when not being watched. Common NJP breaches of integrity include: cheating on a test, stealing, underage drinking, and failing to come to work.**



Results: Breaches of Integrity for E1-E3 Sailors FY2007 – FY2011



Results from the Pearson chi-square statistical test indicate integrity breaches decreased significantly from FY 2009, FY2010, and FY2011 to FY 2007 and 2008. Specific results are reported in the following slide.



Statistical Results using Pearson Chi-Square Test

Based on Integrity breach data and the AAOB* from CETARS (DEC 2010; NOV 2011)

- FY2010 differs significantly from FY2007 $\chi^2((1)=19.01, p<.001)$ and FY2008 $\chi^2(1)=18.76, p<.001)$.**
- FY2011 also differs significantly from FY2007 $\chi^2((1)=14.11, p<.001)$ and FY2008 $\chi^2(1)=13.98, p<.001)$.**
- FY2007 and FY2008 do not differ significantly from each other.**

***AAOB refers to the average on-board for NSS A-School Sailor population. A-School Sailors attend apprentice courses that are required prior to a seaman's first sea tour. AAOB refers to the number of students on board each day averaged over one year.**

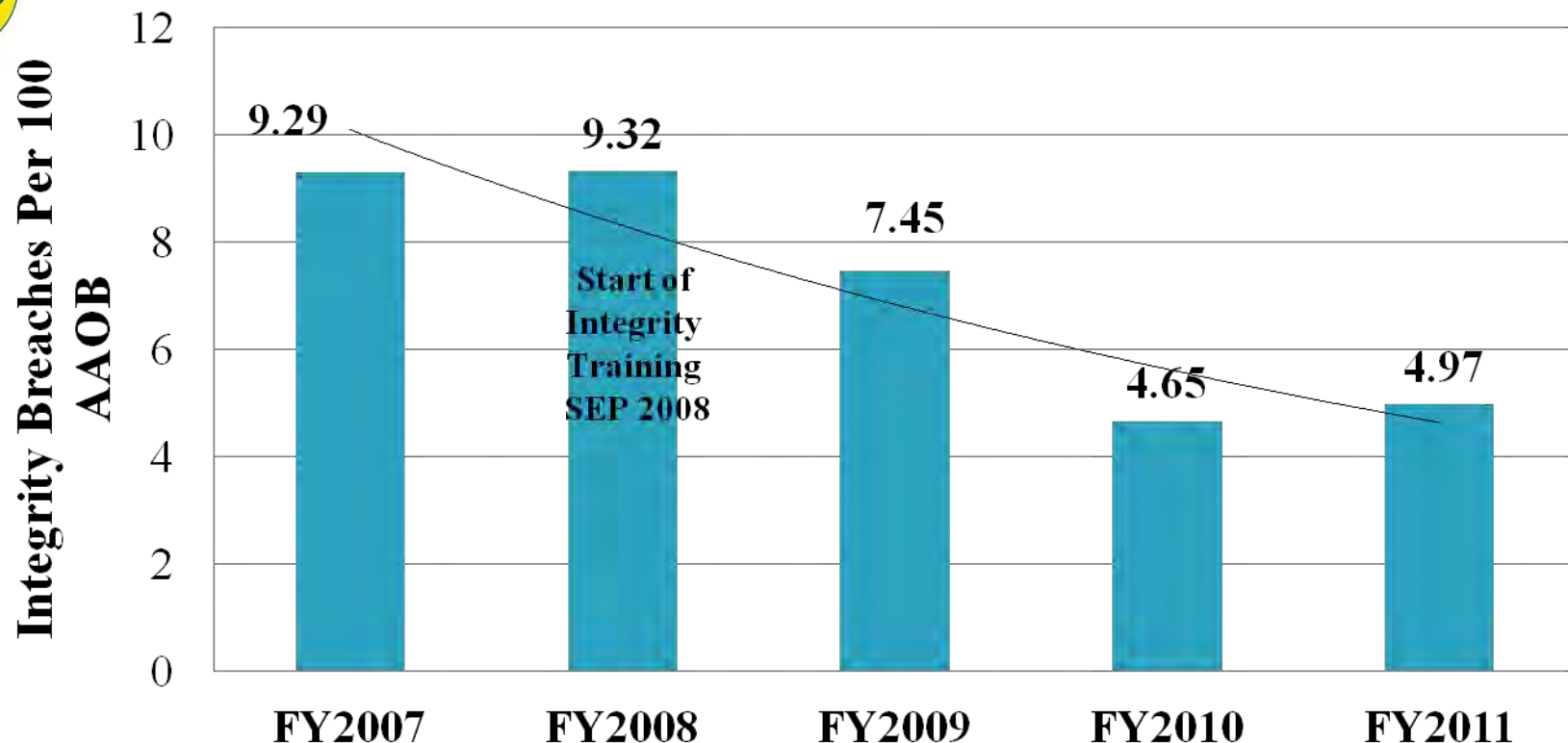


Results: Impact of Integrity Training on E1-E3 Sailors

- **Discussions with BESS, SECF, and SCERF instructors, LPOs, and Division Officers during FY 2009 - FY 2011 indicate that instructor expectation of Sailor behavior is high and creates an effect of general awareness at NSS:**
 - **Integrity module instructors feel students are attentive and engaged during integrity training**
 - **A school-courses begin with a review of Navy Core Values**



Trend Data: Estimating Control Limits of Integrity Breach Rate



Averages range from 4.65 to 7.55 integrity breaches per 100 AAOB since Integrity Training commenced in SEP 2008. Based on the to-date data, if Integrity Breach rate rises or a trend is observed above 5.25 - 5.50, a close evaluation of integrity training for the E1-E3 population is recommended.

Submarine Learning Center



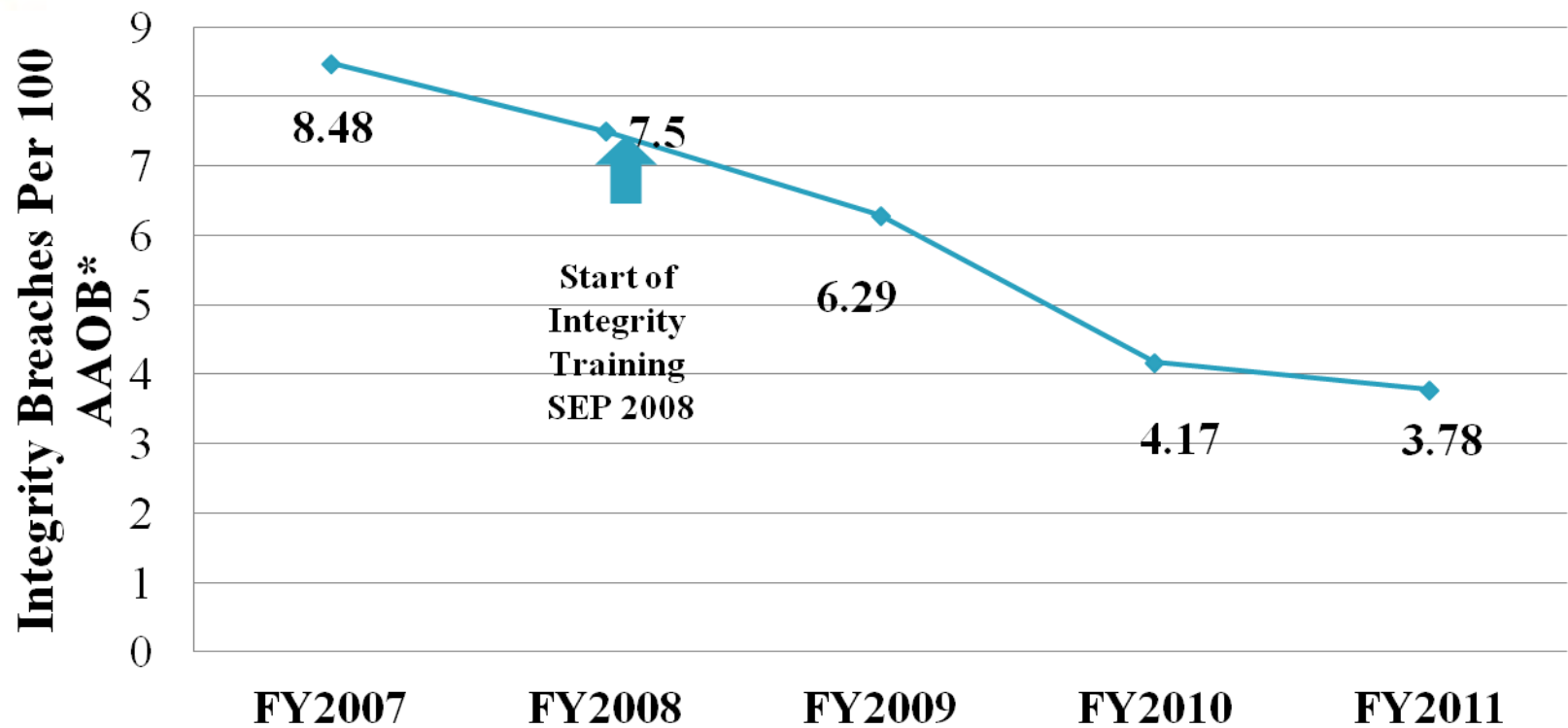
Breaches of Integrity Adjusted for Alcohol-Related Offenses

SLC and NSS leadership discussed the exclusion of alcohol-related offenses in the operational definition of Breaches of Integrity. This discussion led to the analysis of:

Breaches of Integrity Adjusted for Alcohol-Related Offenses for E1-E3 Sailors FY2007 – FY2011



Results: Breaches of Integrity Adjusted for Alcohol-Related Offenses for E1-E3 Sailors FY2007 – FY2011



Results from the Pearson chi-square statistical test indicate integrity breaches decreased significantly from FY 2009, FY2010, and FY2011 to FY 2007 and 2008. Specific results are reported in the following slide.



Alcohol Adjusted Statistical Results using Pearson Chi-Square Test

**Based on Integrity breach data and the AAOB* from
CETARS (DEC 2010; NOV 2011)**

- FY2010 differs significantly from FY2007 $\chi^2((1)=17.99, p<.001)$ and FY2008 $\chi^2(1)=18.78, p<.005$;**
- FY2011 also differs significantly from FY2007 $\chi^2((1)=19.27, p<.001)$ and FY2008 $\chi^2(1)=12.77, p<.001$.**
- FY2007 and FY2008 do not differ significantly from each other. (Note 1 below about 2009 Sailor population.)**

***AAOB refers to the average on-board for NSS A-School Sailor population. A-School Sailors attend apprentice courses that are required prior to a seaman's first sea tour. AAOB refers to the number of students on board each day averaged over one year.**



Appendices



APPENDIX A: Integrity Breaches

NJP DATA and AAOB for FY 2007- 2011

FY	Integrity Breaches E1-E3 Sailors	NJP E1-E3 Sailors	Percent Integrity Breaches E1-E3	NJP ALL RATES	AAOB A-School	Percent Integrity Breaches/ AAOB
2007	92	190	48.4%	211	990	9.29%
2008	87	183	47.5%	192	933	9.32%
2009*	77	168	45.8%	179	1033	7.55%
2010	58	110	52.7%	118	1247	4.65%
2011	50	84	59.5%	89	1006	4.97%



APPENDIX B: Integrity Breaches without Alcohol Offenses: NJP DATA and AAOB for FY 2007- 2011

FYs	Integrity Breaches without Alcohol Offenses E1-E3 Sailors	NJP E1-E3 Sailors	Percent Integrity Breaches E1-E3	NJP ALL RATES	AAOB A-School	Percent Integrity Breaches/ AAOB
2007	84	190	44.2%	211	990	8.48%
2008	70	183	38.3%	192	933	7.50%
2009*	65	168	38.7%	179	1033	6.29%
2010	52	110	47.3%	118	1247	4.17%
2011	38	84	45.2%	89	1006	3.78%